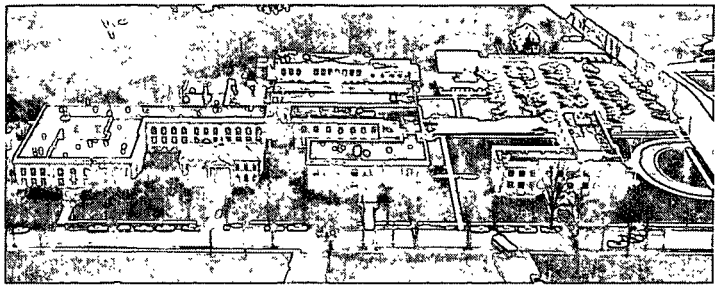

THE INSTITUTE OF PAPER CHEMISTRY, APPLETON, WISCONSIN

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL CORRUGATING MEDIUM DATA FOR JUL-AUG, SEP-OCT, NOV-DEC, 1988)

Project 2694-2

Report Sixty-Eight

A Progress Report

to

FOURDRINIER KRAFT BOARD GROUP

OF THE

AMERICAN PAPER INSTITUTE

March 1, 1989

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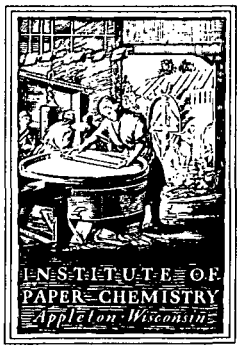


THE INSTITUTE OF PAPER CHEMISTRY
Post Office Box 1039
Appleton, Wisconsin 54912
Phone: 414/734-9251
FAX: 414/738-3448
Telex: 469289

March 1, 1989

Project 2694-2

Dear Sir:

We are enclosing a copy of the following report to the Fourdrinier Kraft Board Group of the American Paper Institute:

Report Sixty-Eight, Project 2694-2, a progress report entitled, "Continuous Baseline Study (Modified) of Mill Corrugating Medium Data for July-August, September-October, November-December, 1988" dated March 1, 1989.

The code identities for paper machines in your company from which data were submitted for evaluation are given on the inside of the front cover of this report.

Sincerely,

Roger H. Van Eperen

Roger H. Van Eperen
Research Associate
Paper Materials Division

RHV/les
Enclosure

GEORGIA-PACIFIC CORP.
Your machine is identified
in this report by the
following code.

Toledo Machine #2 U4

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL CORRUGATING MEDIUM DATA FOR JUL-AUG, SEP-OCT, NOV-DEC, 1988)

Project 2694-2

Report Sixty-Eight

A Progress Report

to

FOURDRINIER KRAFT BOARD GROUP

OF THE

AMERICAN PAPER INSTITUTE

March 1, 1989

TABLE OF CONTENTS

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

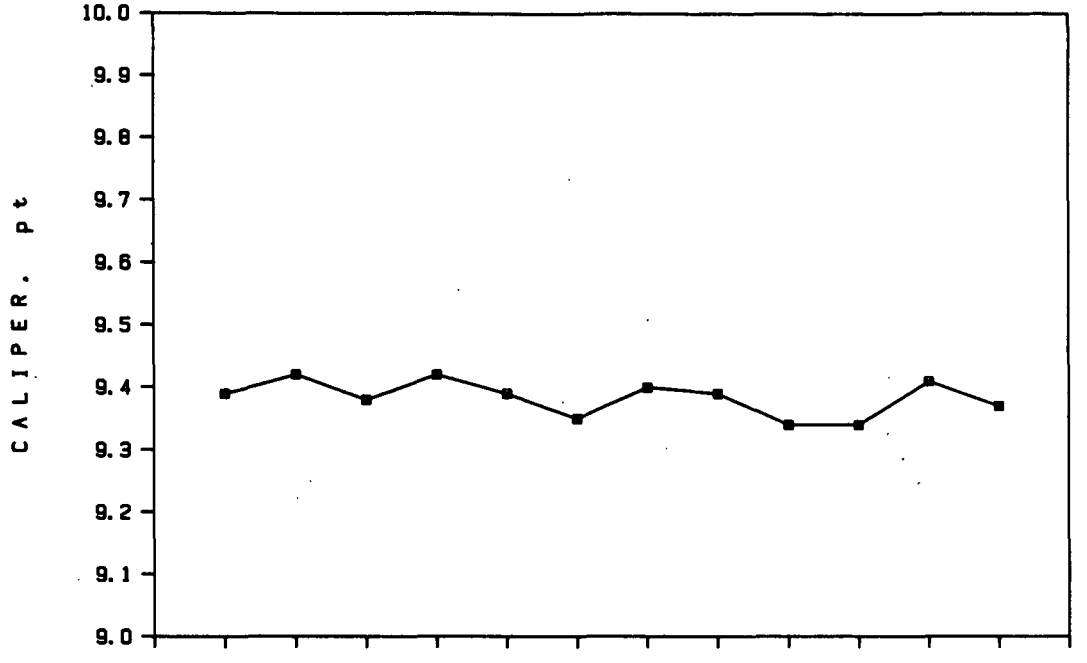
CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL CORRUGATING MEDIUM DATA FOR JUL-AUG, SEP-OCT, NOV-DEC, 1988)

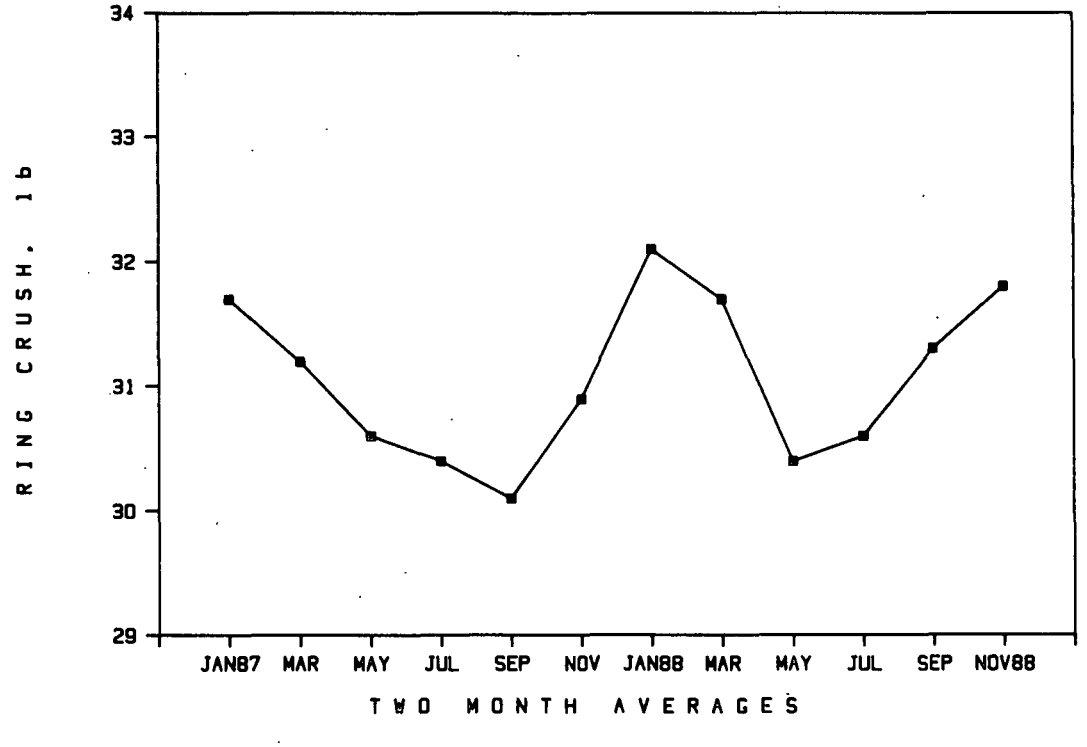
SUMMARY OF 26-LB CORRUGATING MEDIUM DATA
(JUL-DEC, 1988)

Test		JUL-AUG		SEP-OCT		NOV-DEC	
		Total	Recycled	Total	Recycled	Total	Recycled
Moisture content, %	Max.	9.6	8.6	9.6	7.6	9.5	7.7
	Min.	5.1	5.1	5.1	5.1	5.3	5.3
	Ave.	7.0(31)	6.4(10)	7.0(31)	6.4(10)	7.0(30)	6.3(10)
Adj. basis weight, lb/M sq ft	Max.	27.2	27.2	28.0	28.0	27.1	27.1
	Min.	24.9	25.8	25.3	25.8	25.4	25.9
	Ave.	26.3(33)	26.4(12)	26.3(33)	26.4(12)	26.3(33)	26.4(12)
Caliper, mil	Max.	11.0	11.0	11.3	11.0	11.2	11.0
	Min.	8.0	8.4	7.8	8.4	8.0	8.4
	Ave.	9.3(27)	9.4(12)	9.4(27)	9.5(12)	9.4(27)	9.5(12)
Concora, lb	Max.	73.5	70.4	70.4	70.4	72.0	69.2
	Min.	56.8	56.8	55.8	55.8	56.8	56.8
	Ave.	61.7(33)	61.3(12)	61.6(33)	61.8(12)	61.8(33)	61.8(12)
CD Ring Crush, lb	Max.	43.0	32.0	42.0	34.5	41.0	33.0
	Min.	24.0	24.9	24.7	24.7	25.2	25.2
	Ave.	30.6(19)	28.7(6)	31.3(19)	28.6(6)	31.8(19)	28.6(6)
CD STFI, lb/in	Max.	15.8		14.8		14.2	
	Min.	9.2		9.0		9.1	
	Ave.	12.8(14)	0.0	12.8(14)	0.0	12.2(13)	0.0

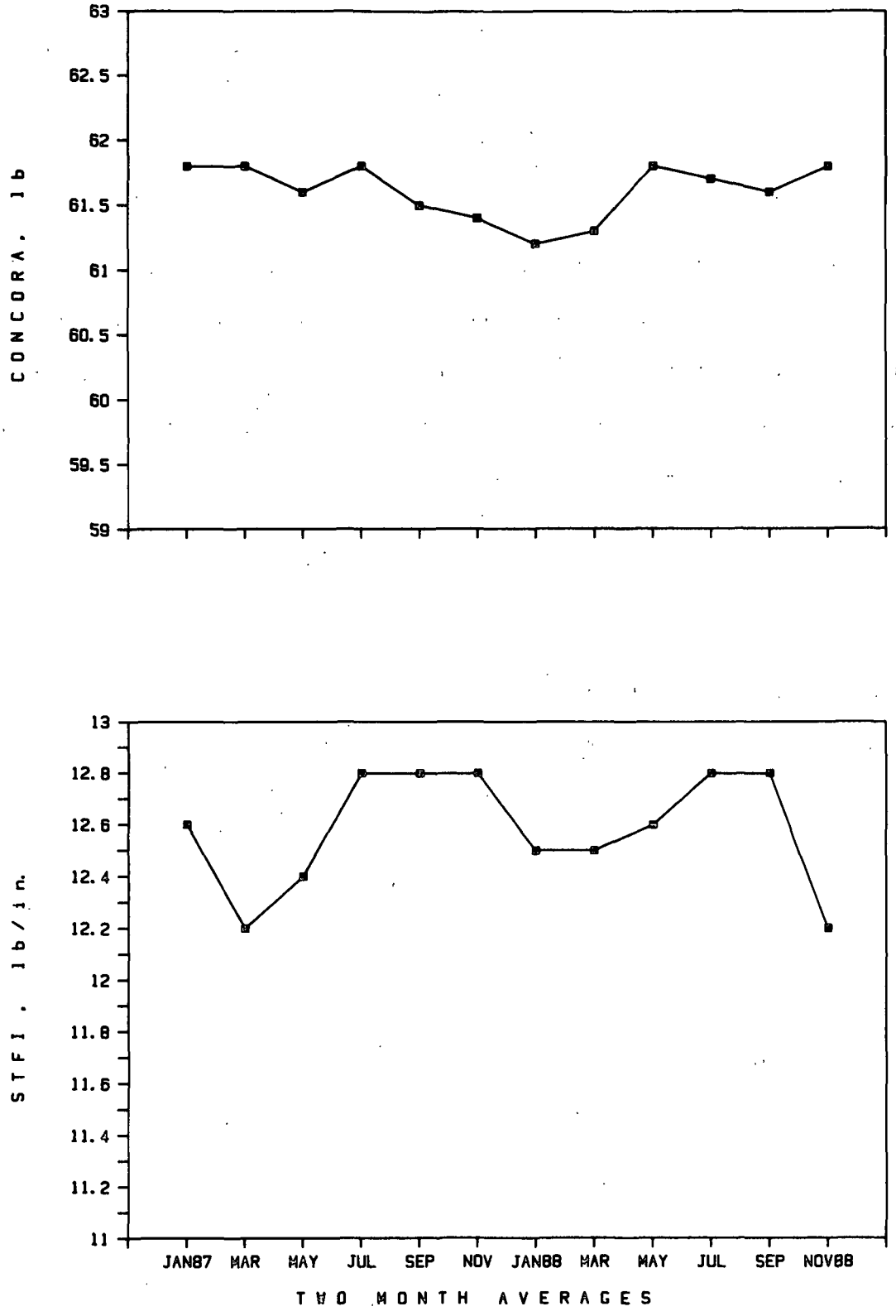
Max. and Min. values are current machine averages.
Ave. value is current F.K.B.G. average, number of machines is indicated in parentheses.

TWO YEAR TREND PLOTS FOR 26-lb MEDIUM





TWO YEAR TREND PLOTS FOR 26-1b MEDIUM



INTRODUCTION

The continuous base-line study (modified) is a compilation of bimonthly averages of mill test data obtained routinely on 26-lb corrugating medium manufactured in the member mills of F.K.B.G. Mill data are included for moisture content, basis weight, caliper, Concora, C.D. ring crush, and C.D. STFI made on the production of individual machines which produced at least 500 tons of this grade weight during a given period.

Participating mills are asked to report reel moisture content, basis weight, and moisture content corresponding to the basis weight measurement. The latter two measurements are used to compute the adjusted basis weight corresponding to a moisture content of 7.8%. Only the reel moisture content and the adjusted basis weight are included in the report.

PRESENTATION OF DATA

For the 26-lb grade weight of corrugating medium referred to earlier, data on conditioning and testing environments, mill test averages for moisture content, adjusted basis weight, caliper, Concora, C.D. ring crush, and C.D. STFI results are compiled in the following tables.

Table Number	Description
I-II-III	Mill Test Averages on 26-Lb Corrugating Medium
IV	Data on Conditioning and Testing Environments

The procedure used in calculating cumulative machine averages, machine factors, machine indexes, and F.K.B.G. indexes are described in the Appendix.

It should be explained that the number of machines for which data are compiled in each table for a specified period varies for these reasons: a machine must have (a) produced at least 500 tons of 26-lb corrugating medium during the specified period, or (b) produced 500 tons of 26-lb corrugating medium during any one or more of the 12 months prior to the specified period (so that a cumulative average is available), to be included in a given table.

TABLE I

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 26 LB CORRUGATING MEDIUM

CODE *C	MOISTURE CONTENT PERCENT CUR. AV.	MOISTURE CONTENT PERCENT CUM. AV.	MOISTURE CONTENT PERCENT IND. *B	ADJ. BASIS WT. *A LB/M SQ FT CUR. AV.	ADJ. BASIS WT. *A LB/M SQ FT CUM. AV.	ADJ. BASIS WT. *A LB/M SQ FT IND. *B	CALIPER MIL CUR. AV.	CALIPER MIL CUM. AV.	CALIPER MIL IND. *B
B1	7.0	7.3	100.0	26.3	26.2	100.0			
H1(R)				27.2	27.0	103.4	9.0	9.0	95.7
I1	7.0	6.6	100.0	26.2	26.4	99.6			
J1	7.6	7.7	108.6	26.2	26.1	99.6	8.5	8.7	90.4
O1(R)		6.3			26.2			8.7	
P1	7.0	6.9	100.0	26.1	26.1	99.2	9.0	8.9	95.7
Q1	5.8	5.9	82.8	26.5	26.4	100.8	10.0	10.2	106.4
R1		6.4			25.8			9.1	
U1	7.3	7.1	104.3	26.4	26.4	100.4	9.0	8.8	95.7
V1	6.5	6.5	92.8	26.4	26.5	100.4			
W1	6.7	6.6	95.7	26.0	25.9	98.8	9.7	9.7	103.2
X1(R)	7.2	7.0	102.8	26.3	26.4	100.0	8.8	8.9	93.6
C2(R)	6.8	6.6	97.1	26.0	26.0	98.8	9.5	9.5	101.1
K2(R)	5.1	5.4	72.8	25.8	26.3	98.1	8.4	7.8	89.4
L2	7.5	7.4	107.1	26.1	26.2	99.2	11.0	10.8	117.0
R2(R)	5.2	5.0	74.3	26.9	26.9	102.3	9.5	9.4	101.1
S2(R)	5.8	5.9	82.8	26.6	26.6	101.1	11.0	11.0	117.0
T2	9.2	8.9	131.4	24.9	25.4	94.7	9.2	9.3	97.9
Y2	6.7	6.7	95.7	27.1	26.9	103.0		10.0	
A3	6.8	6.6	97.1	26.2	26.2	99.6	8.0	7.6	85.1
B3	7.1	7.3	101.4	26.3	26.1	100.0			
J3	8.8	8.7	125.7	26.1	26.0	99.2	8.7	9.3	92.6
N3(R)	8.6	8.3	122.8	25.8	25.7	98.1	8.4	8.0	89.4
Q3	7.7	7.6	110.0	26.3	26.4	100.0	9.8	10.1	104.2
R3	6.0	6.1	85.7	26.7	26.7	101.5	9.3	9.4	98.9
S3(R)				26.1	26.1	99.2	9.0	9.0	95.7
T3	6.9	7.0	98.6	26.2	26.4	99.6	8.5	8.6	90.4
U3	7.5	7.6	107.1	26.3	26.4	100.0	9.7	9.8	103.2
V3(R)	6.5	6.4	92.8	26.7	26.8	101.5	9.0	9.1	95.7
B4	7.0	7.4	100.0	26.0	26.1	98.8			
I4	9.6	9.5	137.1	25.2	25.4	95.8	9.5	9.8	101.1
Q4(R)	5.5	5.4	78.6	26.8	26.8	101.9	9.2	9.3	97.9
R4	7.8	7.7	111.4	26.4	26.7	100.4	9.3	9.4	98.9
U4(R)	7.0	7.0	100.0	26.0	26.0	98.8	10.8	11.0	114.9
V4(R)	5.3	5.8	82.8	26.8	26.8	101.9	10.4	10.5	110.6
FKBG	7.0	7.0	100.0	26.3	26.3	100.0	9.3	9.4	98.9
(R)	6.4	6.3	101.6	26.4	26.4	100.0	9.4	9.3	101.3

NOTES A, B, AND C ARE GIVEN IN APPENDIX.

TABLE I (CONT)

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 26 LB CORRUGATING MEDIUM

CODE *C	CONCORA LB CUR. AV.	CONCORA LB CUM. AV.	CONCORA LB IND. *B	CD RING CRUSH, LB CUR. AV.	CD RING CRUSH, LB CUM. AV.	CD RING CRUSH, LB IND. *B	CD STFI LB/IN CUR. AV.	CD STFI LB/IN CUM. AV.	CD STFI LB/IN IND. *B
B1	62.0	61.2	100.8	27.0	27.8	87.4			
H1(R)	56.8	59.6	92.4						
I1	59.0	60.1	95.9	24.0	27.5	77.7	12.9	12.0	101.6
J1	58.0	59.7	94.3	37.0	38.8	119.7	13.2	13.9	103.9
O1(R)		54.3			38.6				
P1	64.0	61.7	104.1				14.4	15.2	113.4
Q1	60.0	60.9	97.6	30.0	31.0	97.1	9.2	9.3	72.4
R1		69.0						12.6	
U1	59.0	59.8	95.9	31.0	30.8	100.3		13.2	
V1	58.0	59.0	94.3	27.0	26.5	87.4	12.6	13.6	99.2
W1	64.0	63.3	104.1	43.0	37.2	139.2	11.0	10.7	86.6
X1(R)	70.4	70.0	114.5						
C2(R)	63.5	62.6	103.2	24.9	27.2	80.6			
K2(R)	59.0	59.1	95.9	29.3	27.7	94.8			
L2	60.6	60.4	98.5	36.6	38.8	118.4			
R2(R)	59.7	60.1	97.1	27.9	23.6	90.3			
S2(R)	60.4	60.0	98.2						
T2	59.5	59.9	96.7				12.4	12.9	97.6
Y2	64.1	62.8	104.2	31.8	26.8	102.9	14.3	13.1	112.6
A3	73.5	72.0	119.5				15.8	13.4	124.4
B3	61.0	61.7	99.2	31.0	29.4	100.3			
J3	63.0	62.2	102.4				12.0	11.7	94.5
N3(R)	65.6	66.4	106.7						
Q3	58.0	58.0	94.3				12.5	12.3	98.4
R3	61.8	64.1	100.5						
S3(R)	57.3	56.7	93.2						
T3	67.0	68.8	108.9				14.0	11.9	110.2
U3	62.5	62.2	101.6	31.5	31.5	101.9	12.2	12.4	96.1
V3(R)	59.5	62.3	96.7	30.5	31.9	98.7			
B4	62.0	60.3	100.8	32.0	33.0	103.6			
I4	64.7	64.5	105.2	28.3	28.8	91.6			
Q4(R)	58.8	59.6	95.6	27.4	23.3	88.7			
R4	58.0	58.2	94.3				12.3	12.0	96.8
U4(R)	64.3	64.1	104.6	32.0	34.1	103.6			
V4(R)	60.7	60.4	98.7						
FKBG	61.7	61.5	100.3	30.6	30.9	99.0	12.8	12.7	100.8
(R)	61.3	61.3	100.0	28.7	30.0	95.7	0.0	0.0	0.0

NOTES B AND C ARE GIVEN IN APPENDIX.

TABLE II

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 26 LB CORRUGATING MEDIUM

CODE *C	MOISTURE CONTENT PERCENT CUR. AV.	MOISTURE CONTENT PERCENT CUM. AV.	MOISTURE CONTENT PERCENT IND. *B	ADJ. BASIS WT. *A LB/M SQ FT CUR. AV.	ADJ. BASIS WT. *A LB/M SQ FT CUM. AV.	ADJ. BASIS WT. *A LB/M SQ FT IND. *B	CALIPER MIL CUR. AV.	CALIPER MIL CUM. AV.	CALIPER MIL IND. *B
B1	7.3	7.3	104.3	26.0	26.2	98.8			
H1(R)				28.0	27.0	106.5	9.0	9.0	95.7
I1	7.0	6.7	100.0	26.2	26.4	99.6			
J1	7.6	7.7	108.6	26.1	26.2	99.2	8.1	8.6	86.2
O1(R)		6.3			26.2			8.7	
P1	6.9	7.0	98.6	26.1	26.1	99.2	9.1	8.9	96.8
Q1	6.0	5.8	85.7	26.3	26.4	100.0	9.9	10.1	105.3
R1		6.4			25.8			9.1	
U1	7.1	7.2	101.4	26.4	26.4	100.4	8.9	8.8	94.7
V1	6.4	6.6	91.4	26.4	26.4	100.4			
W1	6.9	6.6	98.6	26.0	26.0	98.8	9.9	9.6	105.3
X1(R)	7.5	7.0	107.1	26.4	26.4	100.4	8.9	8.8	94.7
C2(R)	7.0	6.7	100.0	25.9	26.0	98.5	9.5	9.5	101.1
K2(R)	5.7	5.4	81.4	26.4	26.2	100.4	9.4	8.0	100.0
L2	7.6	7.4	108.6	26.2	26.2	99.6	11.3	10.8	120.2
R2(R)	5.1	5.2	72.8	26.8	26.9	101.9	9.5	9.4	101.1
S2(R)	6.2	5.9	88.6	25.8	26.6	98.1	11.0	11.0	117.0
T2	9.2	9.0	131.4	25.4	25.3	96.6	9.2	9.3	97.9
Y2	6.6	6.7	94.3	27.0	26.9	102.7			
A3	6.4	6.7	91.4	26.1	26.2	99.2	7.8	7.7	83.0
B3	7.2	7.2	102.8	26.5	26.2	100.8			
J3	8.7	8.7	124.3	25.9	26.0	98.5	8.9	9.1	94.7
N3(R)	7.6	8.4	108.6	26.1	25.7	99.2	8.4	8.1	89.4
Q3	7.7	7.6	110.0	26.2	26.4	99.6	9.8	10.1	104.2
R3	5.9	6.1	84.3	26.7	26.7	101.5	9.8	9.4	104.2
S3(R)				25.8	26.1	98.1	9.0	9.0	95.7
T3	6.3	7.0	97.1	26.2	26.3	99.6	8.6	8.6	91.5
U3	8.0	7.6	114.3	26.3	26.4	100.0	9.8	9.8	104.2
V3(R)	6.5	6.4	92.8	26.9	26.8	102.3	9.0	9.1	95.7
B4	7.2	7.3	102.8	26.0	26.1	98.8			
I4	9.6	9.5	137.1	25.3	25.4	96.2	9.4	9.7	100.0
Q4(R)	5.4	5.4	77.1	26.7	26.8	101.5	9.3	9.3	98.9
R4	7.7	7.7	110.0	26.2	26.6	99.6	9.4	9.4	100.0
U4(R)	7.0	7.0	100.0	26.1	26.0	99.2	10.8	11.0	114.9
V4(R)	5.8	5.8	82.8	26.4	26.7	100.4	10.4	10.4	110.6
FKDG	7.0	7.0	100.0	26.3	26.3	100.0	9.4	9.4	100.0
(R)	6.4	6.4	100.0	26.4	26.4	100.0	9.5	9.3	102.4

NOTES A, B, AND C ARE GIVEN IN APPENDIX.

TABLE II (CONT)

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 26 LB CORRUGATING MEDIUM

CODE *C	CONCORA LB CUR. AV.	CONCORA LB CUM. AV.	CONCORA LB IND. *B	CD RING CRUSH, LB CUR. AV.	CD RING CRUSH, LB CUM. AV.	CD RING CRUSH, LB IND. *B	CD STFI LB/IN CUR. AV.	CD STFI LB/IN CUM. AV.	CD STFI LB/IN IND. *B
B1	60.0	61.5	97.6	28.0	27.7	90.3			
H1(R)	63.9	59.1	103.9						
I1	59.5	59.8	96.7	27.0	26.9	87.1	12.7	12.2	100.0
J1	60.0	59.2	97.6	39.0	38.5	125.8	14.1	13.8	111.0
O1(R)		54.3			38.6				
P1	60.0	62.0	97.6				14.8	15.0	116.5
Q1	60.0	60.8	97.6	31.0	30.0	100.0	9.0	9.2	70.9
R1		69.0						12.6	
U1	60.0	59.7	97.6	31.0	31.0	100.0		13.3	
V1	57.5	58.9	93.5	29.5	26.7	95.2	13.4	13.4	105.5
W1	69.0	63.7	112.2	42.0	38.3	135.5	11.0	10.8	86.6
X1(R)	70.4	69.6	114.5						
C2(R)	63.2	62.8	102.8	24.7	26.6	79.7			
K2(R)	58.4	59.0	95.0	28.2	27.9	91.0			
L2	61.1	60.4	99.3	39.8	38.0	128.4			
R2(R)	59.8	60.1	97.2	26.4	24.6	85.2			
S2(R)	60.4	60.0	98.2						
T2	59.5	59.6	96.7				13.1	12.9	103.1
Y2	64.4	63.1	104.7	31.5	27.2	101.6	14.0	13.2	110.2
A3	69.0	72.5	112.2				14.3	14.2	112.6
B3	61.0	61.5	99.2	33.0	30.0	106.4			
J3	62.0	62.3	100.8				12.2	11.7	96.1
N3(R)	65.4	66.1	106.3						
Q3	53.0	57.8	94.3				12.4	12.2	97.6
R3	60.9	64.0	99.0						
S3(R)	55.3	56.9	90.7						
T3	66.0	68.2	107.3				13.8	12.1	108.7
U3	62.0	62.3	100.8	32.0	31.5	103.2	12.2	12.3	96.1
V3(R)	59.5	61.8	96.7	34.5	31.9	111.3			
B4	60.0	60.5	97.6	31.0	32.8	100.0			
I4	65.2	64.5	106.0	28.4	28.8	91.6			
Q4(R)	59.1	59.7	96.1	26.1	24.3	84.2			
R4	58.0	58.0	94.3				12.0	12.1	94.5
U4(R)	64.7	64.1	105.2	32.0	33.8	103.2			
V4(R)	60.5	60.5	98.4						
FK3G	61.6	61.5	100.2	31.3	31.0	101.0	12.8	12.7	100.8
(R)	61.8	61.2	101.0	28.6	30.2	94.7	0.0	0.0	0.0

NOTES B AND C ARE GIVEN IN APPENDIX.

TABLE III

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 26 LB CORRUGATING MEDIUM

CODE *C	MOISTURE CONTENT PERCENT CUR. AV.	MOISTURE CONTENT PERCENT CUM. AV.	MOISTURE CONTENT PERCENT IND. *B	ADJ. BASIS WT. *A LB/M SQ FT CUR. AV.	ADJ. BASIS WT. *A LB/M SQ FT CUM. AV.	ADJ. BASIS WT. *A LB/M SQ FT IND. *B	CALIPER MIL CUR. AV.	CALIPER MIL CUM. AV.	CALIPER MIL IND. *B
B1	7.4	7.3	105.7	26.0	26.2	98.8			
H1(R)				27.1	27.2	103.0	9.0	9.0	95.7
I1	7.0	6.8	100.0	26.2	26.2	99.6			
J1	7.5	7.7	107.1	26.2	26.2	99.6	8.0	8.5	85.1
O1(R)		6.3			26.3			8.8	
P1	7.0	6.9	100.0	26.1	26.1	99.2	9.1	9.0	96.8
Q1	5.8	5.8	82.8	26.4	26.4	100.4	9.7	9.9	103.2
R1		6.4			25.8			9.1	
U1		7.2		26.3	26.4	100.0	8.9	8.8	94.7
V1	6.6	6.5	94.3	26.4	26.4	100.4			
W1	6.8	6.6	97.1	26.0	26.0	98.8	9.7	9.7	103.2
X1(R)	7.7	7.2	110.0	26.3	26.4	100.0	9.0	8.8	95.7
C2(R)	6.9	6.9	98.6	26.0	26.0	98.8	9.5	9.5	101.1
K2(R)	6.3	5.5	90.0	26.2	26.2	99.6	9.1	8.3	96.8
L2	7.5	7.4	107.1	26.3	26.2	100.0	11.2	10.9	119.1
R2(R)	5.3	5.2	75.7	26.7	26.8	101.5	9.2	9.5	97.9
S2(R)	6.0	6.0	85.7	26.5	26.4	100.8	11.0	11.0	117.0
T2	9.0	9.0	128.6	25.6	25.2	97.3	9.2	9.3	97.9
Y2	6.6	6.7	94.3	27.1	27.0	103.0			
A3	6.5	6.6	92.8	26.1	26.2	99.2	8.6	7.8	91.5
B3	7.3	7.2	104.3	26.5	26.2	100.8			
J3	8.9	8.7	127.1	25.9	26.0	98.5	8.8	9.1	93.6
N3(R)	6.4	8.3	91.4	26.4	25.8	100.4	8.4	8.2	89.4
Q3	7.8	7.7	111.4	26.2	26.3	99.6	9.7	10.0	103.2
R3	6.0	6.1	85.7	26.8	26.7	101.9	9.7	9.6	103.2
S3(R)				25.9	26.1	98.5	9.0	9.0	95.7
T3	6.9	7.0	98.6	26.1	26.2	99.2	8.4	8.6	89.4
U3	7.5	7.6	107.1	26.5	26.4	100.8	9.8	9.8	104.2
V3(R)	6.3	6.5	90.0	26.7	26.8	101.5	9.0	9.0	95.7
B4	7.2	7.3	102.8	26.0	26.1	98.8			
I4	9.5	9.5	135.7	25.4	25.4	96.6	9.4	9.6	100.0
Q4(R)	5.4	5.4	77.1	26.7	26.8	101.5	9.2	9.3	97.9
R4	7.7	7.7	110.0	26.3	26.6	100.0	9.1	9.4	96.8
U4(R)	7.0	7.0	100.0	26.0	26.0	98.8	10.7	11.0	113.8
V4(R)	5.8	5.8	82.8	26.7	26.7	101.5	10.6	10.4	112.8
FKBG	7.0	7.0	100.0	26.3	26.3	100.0	9.4	9.4	100.0
(R)	6.3	6.4	98.4	26.4	26.4	100.0	9.5	9.4	100.8

NOTES A, B, AND C ARE GIVEN IN APPENDIX.

TABLE III (CONT)

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 26 LB CORRUGATING MEDIUM

CODE *C	CONCORA LB CUR. AV.	CONCORA LB CUM. AV.	CONCORA LB IND. *B	CD RING CRUSH, LB CUR. AV.	CD RING CRUSH, LB CUM. AV.	CD RING CRUSH, LB IND. *B	CD STFI LB/IN CUR. AV.	CD STFI LB/IN CUM. AV.	CD STFI LB/IN IND. *B
B1	60.0	61.5	97.6	29.0	27.5	92.9			
H1(R)	61.2	60.3	99.5						
I1	60.0	59.8	97.6	26.8	26.5	85.9		12.3	
J1	60.0	59.0	97.6	39.0	38.7	125.0	14.1	13.9	111.0
O1(R)		54.1			38.8				
P1	59.0	61.7	95.9				14.2	14.9	111.8
Q1	61.0	60.6	99.2	31.0	30.3	99.4	9.1	9.2	71.6
R1		69.0						12.6	
U1	59.0	59.7	95.9	31.0	31.2	99.4	11.9	13.4	93.7
V1	58.5	58.5	95.1	31.8	27.2	101.9		13.4	
W1	67.0	64.8	108.9	41.0	39.1	131.4	11.0	10.9	86.6
X1(R)	69.2	69.8	112.5						
C2(R)	63.3	62.9	102.9	25.2	26.3	80.8			
K2(R)	58.5	59.0	95.1	29.4	28.0	94.2			
L2	62.4	60.5	101.5	40.6	38.1	130.1			
R2(R)	60.6	60.0	98.5	26.3	25.4	84.3			
S2(R)	60.1	60.2	97.7						
T2	59.5	59.5	96.7				13.0	12.9	102.4
Y2	63.3	63.4	102.9	32.4	29.2	103.8	13.5	13.4	106.3
A3	72.0	71.6	117.1				13.2	14.2	103.9
B3	61.0	61.3	99.2	34.0	30.7	109.0			
J3	63.0	62.3	102.4				11.5	11.6	90.6
N3(R)	66.2	65.7	107.6						
Q3	58.0	57.7	94.3				12.2	12.2	96.1
R3	61.7	63.2	100.3						
S3(R)	56.3	56.9	92.4						
T3	67.0	67.8	108.9				11.4	12.4	89.8
U3	61.5	62.3	100.0	37.0	31.8	113.6	11.8	12.3	92.9
V3(R)	60.5	60.8	98.4	32.6	32.5	104.5			
B4	59.0	60.3	95.9	32.0	32.5	102.6			
I4	65.4	64.5	106.3	27.3	29.0	87.5			
Q4(R)	59.8	59.6	97.2	25.4	25.0	81.4			
R4	59.0	57.8	95.9				11.9	12.1	93.7
U4(R)	65.0	64.2	105.7	33.0	33.4	105.8			
V4(R)	60.2	60.4	97.9						
FKBG	61.8	61.5	100.5	31.8	31.2	101.9	12.2	12.7	96.1
(R)	61.8	61.2	101.0	28.6	30.1	95.0	0.0	0.0	0.0

NOTES B AND C ARE GIVEN IN APPENDIX.

TABLE IV

DATA ON CONDITIONING AND TESTING ENVIRONMENTS

JUL-AUG, SEP-OCT, NOV-DEC, 1988

	Conditioning Environment				Testing Environment
	Are Quality Samples	Procedure			Are Quality Samples Tested
Code	Conditioned Before Testing?	Time	Temp., °F	RH, %	Under Controlled Conditions of Temperature & Humidity?
B1	No	--	--	--	No
H1	Yes	--	--	--	Yes
I1	No	--	--	--	Yes
J1	No	--	--	--	Yes: 72 ± 2°F; 50 ± 1% RH
O1	No data has been submitted for this period				
P1	No	--	--	--	Yes: 73°F; 50% RH
Q1	No	--	--	--	No
R1	No data has been submitted for this period				
U1	No	--	--	--	No
V1	No	--	--	--	Yes
W1	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
X1	No	--	--	--	Yes: 72 ± 1°F; 50 ± 1% RH
C2	No	--	--	--	Yes: 72 ± 2°F; 50 ± 3% RH
K2	Yes	--	--	--	Yes: 75 ± 2°F; 50 ± 5% RH
L2	No	--	--	--	Yes: 70 ± 2°F; 50 ± 2% RH
R2	No	--	--	--	Yes: 70 ± 1°F; 50 ± 2% RH
S2	No	--	--	--	Yes: 72 ± 4°F; 50 ± 5% RH
T2	No	--	--	--	Yes: 72 ± 3°F; 50 ± 2% RH
Y2	No	--	--	--	No
A3	No	--	--	--	Yes: 73 ± 2°F: 50 ± 2% RH
B3	No	--	--	--	No
J3	No	--	--	--	Yes: 70 ± 2°F; 50 ± 10% RH
N3	No	--	--	--	No
Q3	No	--	--	--	Yes: 72 ± 2°F; 50 ± 2% RH
R3	No	--	--		Yes: 72 ± 2°F; 50 ± 2% RH
S3	Yes	--	--	--	Yes
T3	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
U3	No	--	--	--	No
V3	No	--	--	--	No
B4	No	--	--	--	No
I4	No	--	--	--	Yes: 72 ± 2°F; 50 ± 2% RH
Q4	No	--	--	--	Yes: 70 ± 1°F; 50 ± 2% RH
R4	No	--	--	--	Yes: 72 ± 2°F; 50 ± 2% RH
U4	No	--	--	--	Yes: 70 ± 2°F; 50 ± 2% RH
V4	No	--	--	--	Yes: 72 ± 4°F; 50 ± 5% RH

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APPENDIX

NOTES A, B, AND C USED IN TABULATIONS OF MILL DATA

Notes A, B, and C, used in the tables of mill data are given below; these notes define the procedure used in calculating adjusted basis weight, machine index, and F.K.B.G. index. It should be stressed that each formula is applicable only to a specific physical property of corrugating medium.

Note A: Adjusted basis weight (ABW) = reported weight (RBW) adjusted to moisture content of 7.8%:

$$ABW = RBW \left[\frac{(100 - \text{reported moisture content, \%})}{(100 - 7.8)} \right]$$

Note B: $$\text{Machine index (\%)} = \left[\frac{\text{Current machine average}}{\text{Cumulative F.K.B.G. average}} \right] \cdot 100 \text{ where}$$

$$\text{Cumulative F.K.B.G. average} = \sum \frac{\text{CFKBGA's}^b \text{ for previous 6 periods excluding CFKBGA for current period}}{6}$$

$$\text{F.K.B.G. index (\%)} = \left[\frac{\text{Current F.K.B.G. average}}{\text{Cumulative F.K.B.G. average}} \right] \cdot 100 \text{ where}$$

$$\text{Current F.K.B.G. average} = \sum \frac{\text{CMA's}^a \text{ for current period for all machines}}{\text{Number of machines}}$$

Note C: (R) - Indicates a medium manufactured from recylced fibers.

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[a] CMA = current machine average for a specific physical property of 26-lb corrugating medium obtained during a given period on a specific machine.

[b] CFKBGA = current F.K.B.G. average for a specific physical property of 26-lb corrugating medium obtained during a given period.